AMENDMENTS TO THE CLAIMS

1. (Currently amended) An apparatus for monitoring the ~~closed position~~ tightened condition of a fuel cap relative to a tank connection pipe, comprising:

a fuel cap;

a tank connection pipe having a wall;

ratchet means connected to the fuel cap for controlling tightening of the fuel cap to the tank connection pipe;

a magnet connected to the fuel cap;

a magnetic switch connected to the tank connection pipe; and

means for sensing abrupt movement of the magnet relative to the magnetic switch, indicating a ~~locked~~ tightened fuel cap condition, by sensing an abrupt change in magnetic field strength of the magnet.

Al cont.

2. (Original) The apparatus of Claim 1, wherein the magnetic switch is a reed switch.

3. (Original) The apparatus of Claim 2, wherein the reed switch is a form A, normally open, reed switch.

4. (Original) The apparatus of Claim 1, wherein the magnetic switch is embedded within the wall of the tank connection pipe.

5. (Original) The apparatus of Claim 1, wherein the fuel cap includes male threading engageable with female threading on an interior surface of the wall of the tank connection pipe.

6. (Currently Amended) A method for monitoring the ~~closed position~~ tightened condition of a fuel cap relative to a tank connection pipe, comprising the steps of:

providing a fuel cap;

providing a tank connection pipe;

providing a magnet connected to the fuel cap;

providing a magnetic switch connected to the tank connection pipe; and

sensing abrupt movement of the magnet relative to the magnetic switch, indicating a tightened fuel cap condition, by sensing an abrupt change in magnetic field strength of the magnet.

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7. (Original) The method of Claim 6, wherein the step of sensing abrupt movement further comprises the steps of:

providing a circuit with a pickup coil and an output;

snapping the fuel cap into a rest condition;

inducing a current pulse in the pickup coil;

sensing the current pulse;

producing a logic level high voltage at the output; and

displaying an indication of a tightened fuel cap condition.

8. (New) A method for monitoring the tightened condition of a fuel cap relative to a tank connection pipe, comprising the steps of:

providing a fuel cap;

providing a tank connection pipe;

providing a magnet connected to the fuel cap;

providing a magnetic switch connected to the tank connection pipe;

providing a circuit with a pickup coil and an output;

snapping the fuel cap into a rest condition;

inducing a current pulse in the pickup coil;

sensing the current pulse;

producing a logic level high voltage at the output;

sensing abrupt movement of the magnet relative to the magnetic switch, indicating a tightened fuel cap condition, by sensing an abrupt change in magnetic field strength of the magnet; and

displaying an indication of a tightened fuel cap condition.